PRE-APPEAL BRIEF REQUEST FOR REVIEW	Docket Number	
	Q80548	

	Application Number	Filed
Mail Stop AF	10/812,056	March 30, 2004
Commissioner for Patents	First Named Inventor	
P.O. Box 1450 Alexandria, VA 22313-1450	Masahiro ITO	
	Art Unit	Examiner
	2629	Grant SITTA

WASHINGTON OFFICE

23373

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Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal

The review is requested for the reasons(s) stated on the attached sheet(s).
　　　Note: No more than five (5) pages may be provided.

☑ I am an attorney or agent of record.

　　Registration number　　25,665

_____
Signature

Howard L. Bernstein
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Typed or printed name

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Telephone number

March 20, 2008
_____
Date

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of | Docket No: Q80548

Masahiro ITO, et al.

Appln. No.: 10/812,056 | Group Art Unit: 2629

Confirmation No.: 1303 | Examiner: Grant SITTA

Filed: March 30, 2004

For: VIDEO PROCESSOR WITH A GAMMA CORRECTION MEMORY OF REDUCED SIZE

PRE-APPEAL BRIEF REQUEST FOR REVIEW

MAIL STOP AF - PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to the Pre-Appeal Brief Conference Pilot Program, and further to the

Examiner's Final Office Action dated November 20, 2007, Applicant files this Pre-Appeal Brief

Request for Review. This Request is also accompanied by the filing of a Notice of Appeal.

Applicant turns now to the rejections at issue:

Claims 1-9 are all the claims pending in the application. Claims 1-5, 7 and 8 have been

examined and stand rejected, claim 6 is objected to as being dependent upon a rejected base

claim, but contains allowable subject matter and claim 9 is allowed. Claim 1, 3 and 4 are

rejected under 35 U.S.C. § 102(e) as being allegedly being anticipated by Atsushi (JP Publication

Number 2002-221950). Applicants traverse the rejection for at least the following reasons.

Claims 2 and 5 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Atsushi in view

of Lumelsky et al. (5,196,924). Claim 7 is rejected under 35 U.S.C. § 103(a) as being

unpatentable over Atsushi in view of Lu et. al (US 7,085,016). Applicant respectfully traverses

the rejection for *at least* the following reasons.

As an initial matter, Applicant respectfully submits that the claims are patentable for the reasons submitted in the Amendment filed on February 11, 2008, **which are incorporated herein by reference** and summarized as follows.

Gamma correction memory

Claim 1 recites, *inter alia*, "a gamma correction memory in which a plurality of N-bit input grayscale levels are mapped to a plurality of K-bit output grayscale levels which are distributed on a non-linear curve corresponding to a non-linear curve on which grayscale levels of a display device are distributed, when said N-bit output video signal of said bit rate converter corresponds to one of the plurality of N-bit input grayscale levels, said gamma correction memory delivering one of the plurality of K-bit output grayscale levels to said display device." In the Final Office Action dated November 20, 2007, the Examiner asserts that Atsushi allegedly discloses the claimed gamma correction memory in paragraphs [0077]-[0086] and drawings 1 and 6.

Atsushi is concerned with using color reduction to store data in a small memory. Atsushi discloses a pseudo-gradation processing means 10 which receives the display data and performs a subtractive color by pseudo-gradation processing to reduce the R component to 4 bits, and G component to 5 bits and the B component to 3 bits. However, Atsushi does not disclose a **gamma** correction memory in which a plurality of N-bit input grayscale levels are mapped to a plurality of K-bit output grayscale levels **which are distributed on a non-linear curve corresponding to a non-linear curve on which grayscale levels** of a display device are **distributed.**

As discussed in the Amendment filed on February 11, 2008, Atsushi discloses a processing means 10 performing **subtractive color** on the RGB components. The output from the processing means 10 is stored in the frame memory 11. That is, the frame memory 11 stores

an R component made to 4 bits, G component made to 5 bits and a B component made to 3 bits (paragraph [0073-0076]). Furthermore, in paragraph [0082], Atsushi discloses that drawing 8 of Atsushi illustrates a process similar to drawing 1, except drawing 8 discloses that all of the RGB components are made to 4 bits (instead of 4, 5 and 3 as illustrated in drawing 1).

Furthermore, in paragraph [0077], Atsushi discloses a gradation correction means 12 of FIG. 1 that converts the 4-bit red component, the 5-bit green component and the 3-bit blue component into 6-bit data. However, Atsushi does not disclose a "**gamma correction**" memory and mapping the N-bit input grayscale levels to a K-bit output grayscale levels which are distributed on a **non-linear curve corresponding to a non-linear curve on which grayscale levels of a display device are distributed.**

In the Advisory Action, the Examiner states that "gamma correction by definition is a non-linear operation used to code and decode luminance. Gradation correction is interchangeable with gamma correction. Since, Atsushi discloses that gradation correction means 12 of Fig. 1 which utilizes a frame memory Fig. 1 (11) to perform this function wherein the frame memory obtains a converted bit rate from a processing means Fig. 1 (10). (see continuation sheet). Applicants respectfully disagree.

Applicants respectfully submit that Atsushi discloses that each component which is shown in drawing 6 and by which subtractive color was carried out is formed into many bits. Moreover, Atsushi discloses that the many bits are formed to 6 bits (64 gradation) (paragraph [0077]). Merriam Webster Online dictionary defines gradation as "a step in an ordered scale." Therefore, Atsushi at most discloses there are 64 steps in an ordered scale which from the 6 bits. However, this does not disclose anything about the **gamma** characteristic of a video display. Specifically, the portion of the references relied on by the Examiner does not disclose "a non-linear curve on which gray scale level of a display device are distributed."

Accordingly, Atsushi also does not disclose that a plurality of N-bit input grayscale levels are mapped to a plurality of K-bit output grayscale levels which are distributed on a non-linear curve corresponding to a non-linear curve on which grayscale levels of a display device are distributed. In particular, Atsushi discloses that each component that is shown in drawing 6 is formed into 6 bits (64 gradation). However, Atsushi discloses that components shown in drawing 6 correspond to components **before** the gradation amendment means 12 amends the shown components into 6-bit data (paragraph [0077]). Therefore, drawing 6 discloses the subtractive color components and does not disclose anything about an output gray scale level which are distributed on a non-linear curve that corresponds to the gamma characteristics of the display device.

In view of the above, Applicants submit that Atsushi merely discloses gradation correction means 12 for amending the subtracting color data stored in frame memory into 6 bits; it does not disclose an N-bit input gray scale levels being mapped to an K-bit output gray scale levels which are distributed on a non linear curve. Furthermore, Atsushi does not discloses the K-bit output gray scale levels which are distributed on a non-linear curve that corresponds to the non-linear curve on which gray scale levels of a display device are distributed. Therefore, Applicants submit that claim 1 is allowable over the cited reference at least the reasons given above.

Claims 3 and 4

Applicants submit that claims 3 and 4 depend from claim 1, and therefore are allowable at least by virtue of their dependency. Applicants traverse the rejection for at least the following reason.

Claims 2 and 5

Applicant submit that since claims 2 and 5 depend from claim 1 and since Lumelsky does

not cure the deficiency noted above with regard to claim 1, claims 2 and 5 are allowable at least

by virtue of their dependency and the additional limitation thereof.

Furthermore, Applicant submits that it would not have been obvious to combine the

teachings of Atsushi and Lumelsky for at least the following reasons provided in page 9 of the

Amendment submitted on February 11, 2008.

Claim 7

Applicants submit that since claim 7 depends from claim 1 and since Lu does not cure the

deficiency noted above with regard to claim 1, claim 7 is allowable at least by virtue of their

dependency and additional limitations thereof.

Conclusion

In view of the above, Applicant submits that the rejections are improper and that the

application is in condition for allowance. Also, the USPTO is directed and authorized to charge

all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-

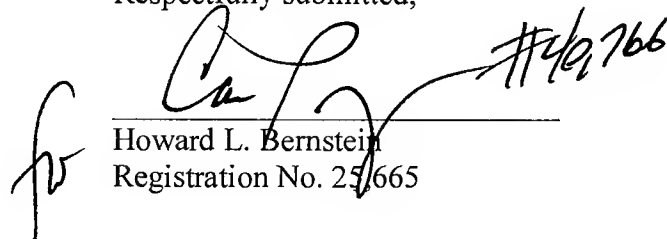4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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Date: March 20, 2008